

Title: ELECTROSPRAY NOZZLE AND MONOLITHIC SUBSTRATE

Inventors: James E. Moon, et al.

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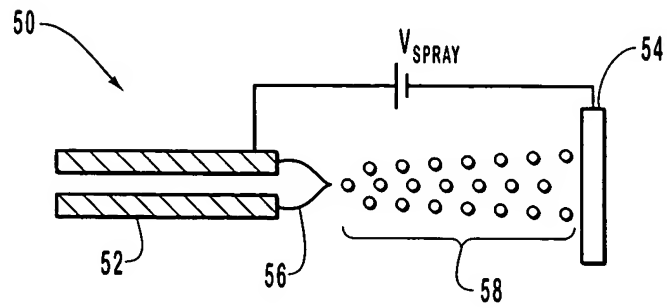


FIG. 1

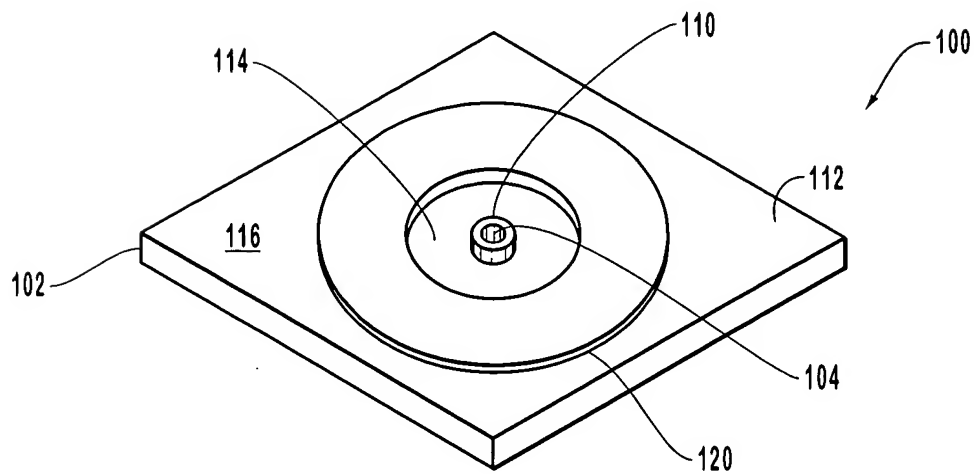


FIG. 2

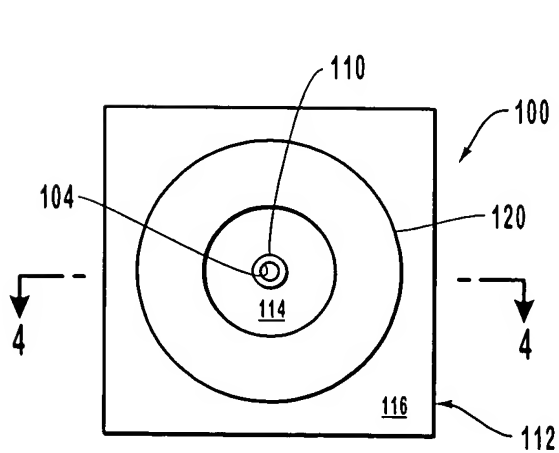


FIG. 3

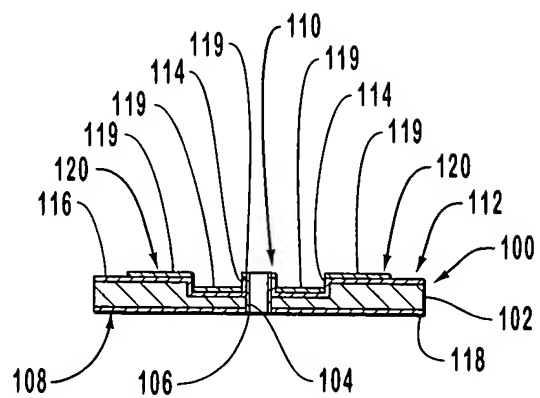


FIG. 4

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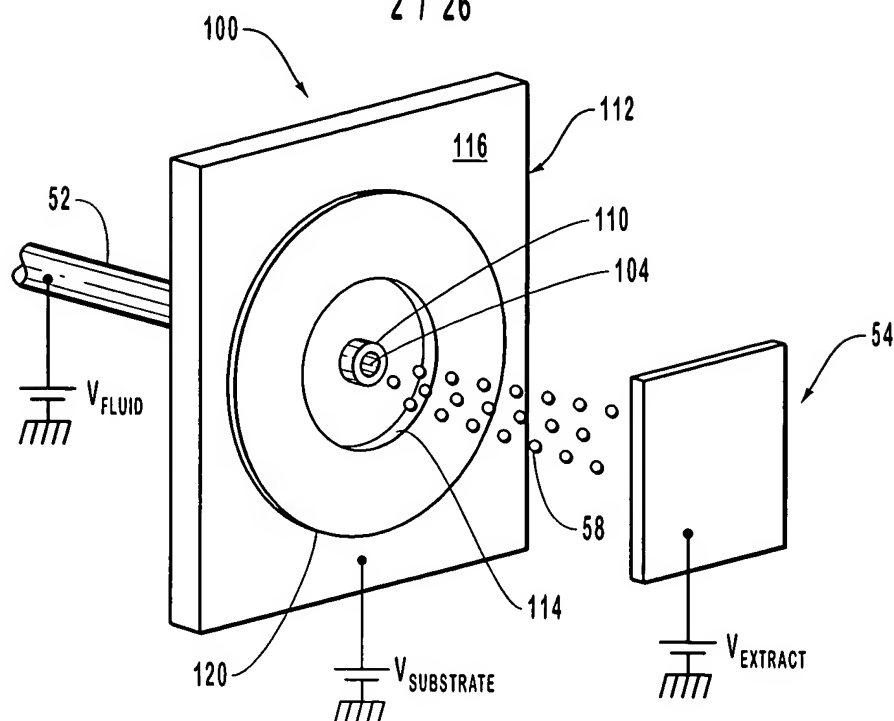


FIG. 5

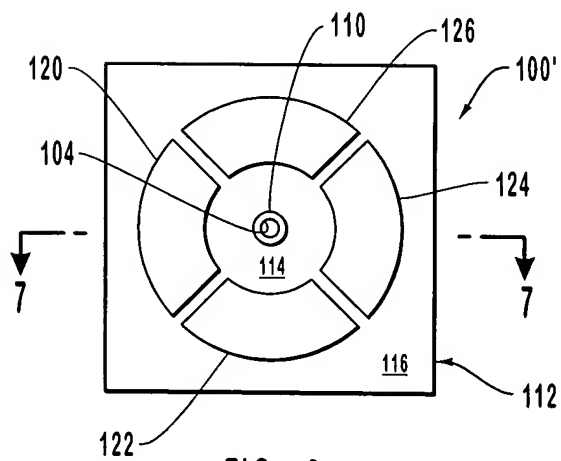


FIG. 6

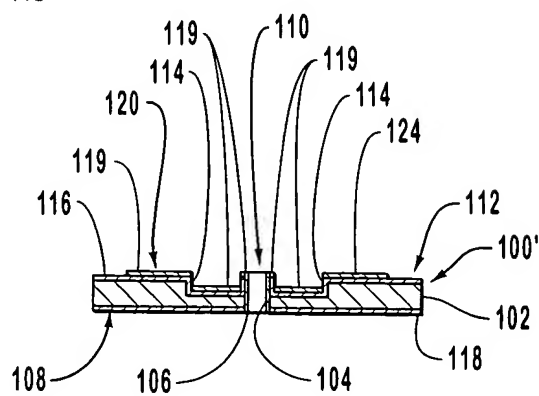


FIG. 7

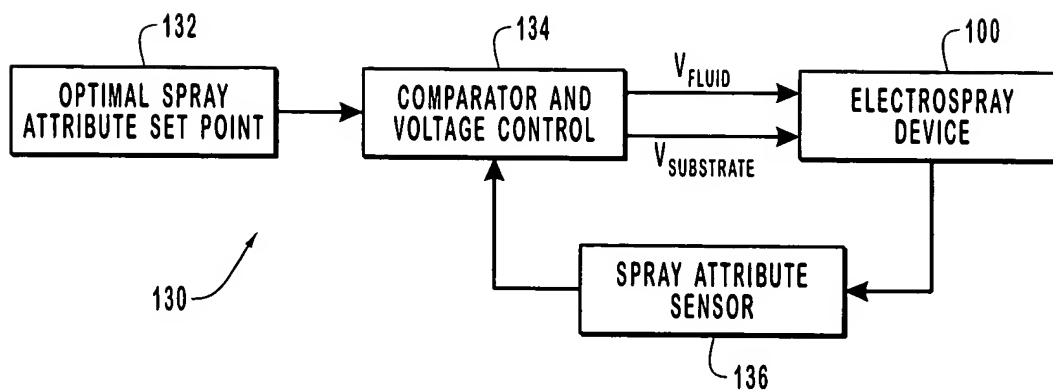


FIG. 8

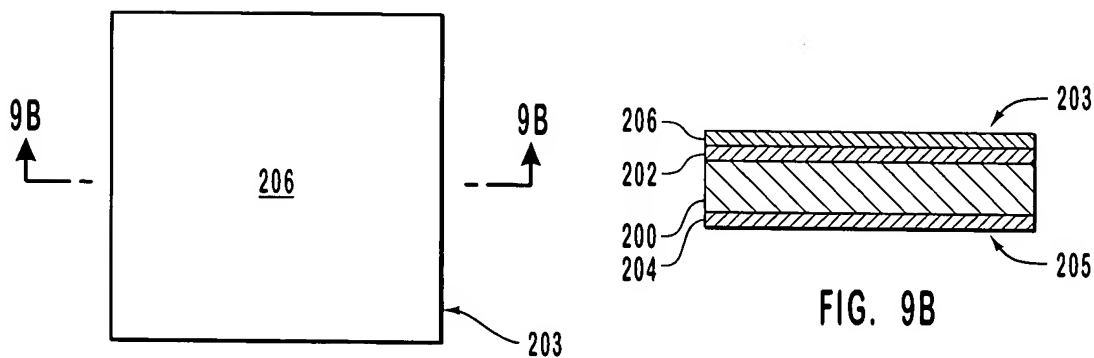


FIG. 9A

FIG. 9B

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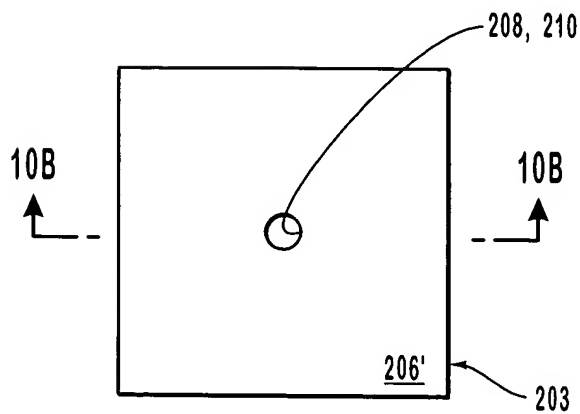


FIG. 10A

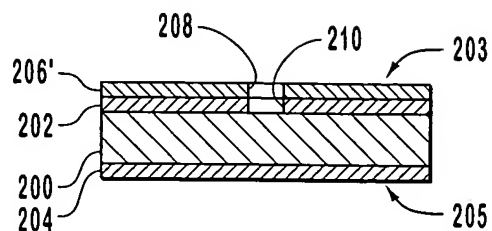


FIG. 10B

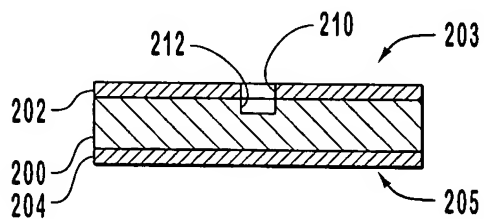


FIG. 11

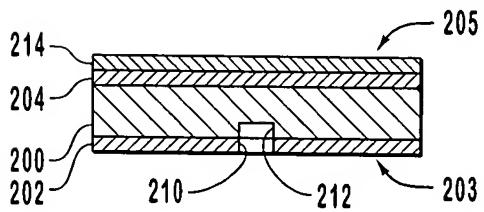


FIG. 12

This cross-sectional view shows a semiconductor device with a central channel region 210. The channel is flanked by side gate regions 212 and 216. The device is formed on a substrate 200, which includes a base layer 202 and a top layer 204. A gate stack 205 is positioned on top of the channel and side gates. The gate stack includes a gate dielectric layer 214' and a gate electrode layer 218. The side gates are connected to a common terminal 203. The channel region is connected to a common terminal 204. The device is surrounded by a passivation layer 110, which includes a top layer 114 and a bottom layer 116.

This diagram shows a cross-sectional view of a second embodiment of the device. It features a central core 104, which is a rectangular block. On either side of the core, there is a U-shaped component 200. The U-shaped component 200 has a top flange 204 and a bottom flange 202. The inner vertical walls of the U-shaped component are labeled 203 and 205. The top flange 204 has a central opening 221. The bottom flange 202 has a central opening 104. The U-shaped component 200 is shown in a cross-section with diagonal hatching.

FIG. 15

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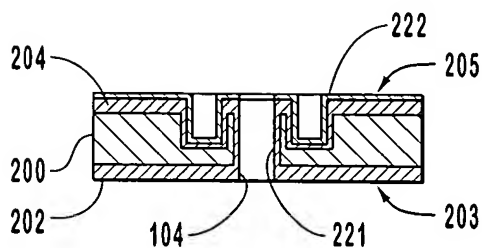


FIG. 16

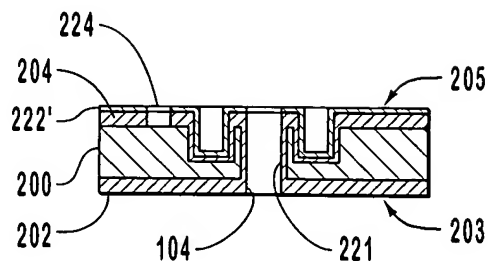


FIG. 17

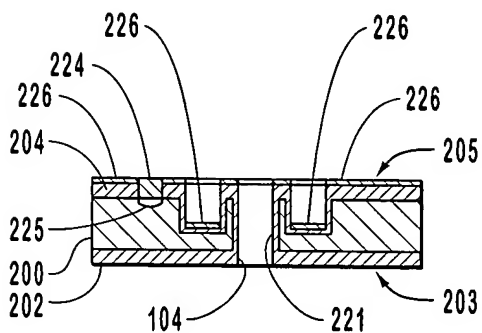


FIG. 18

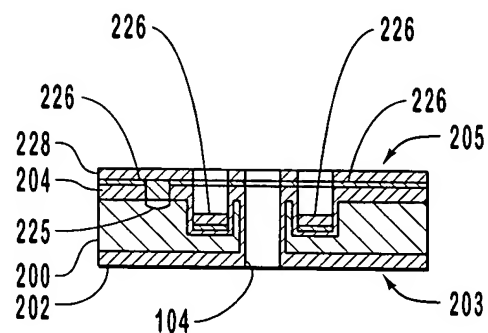


FIG. 19

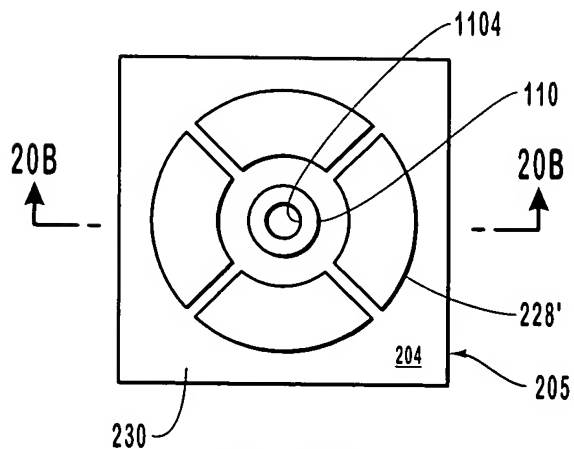


FIG. 20A

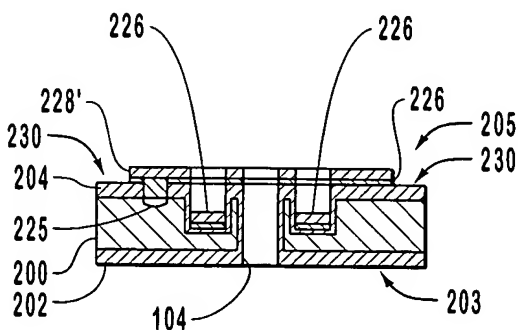


FIG. 20B

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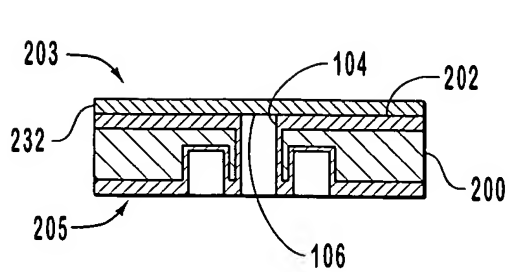


FIG. 20C

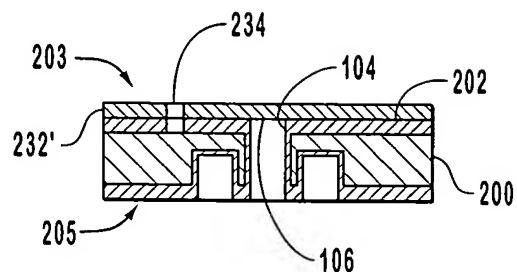


FIG. 20D

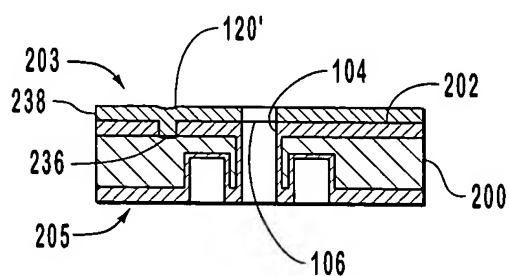


FIG. 20E

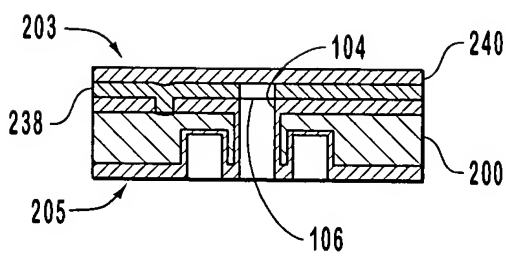


FIG. 20F

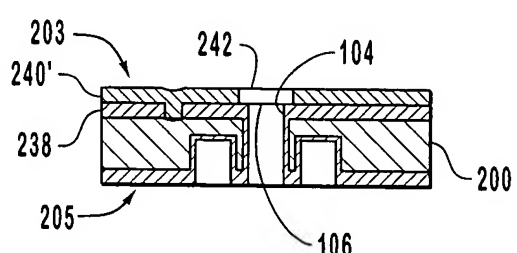


FIG. 20G

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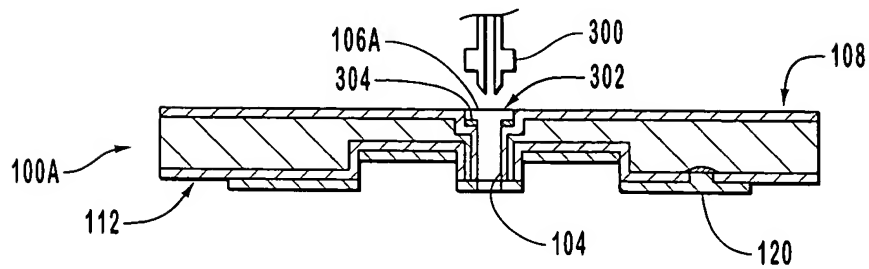


FIG. 21A

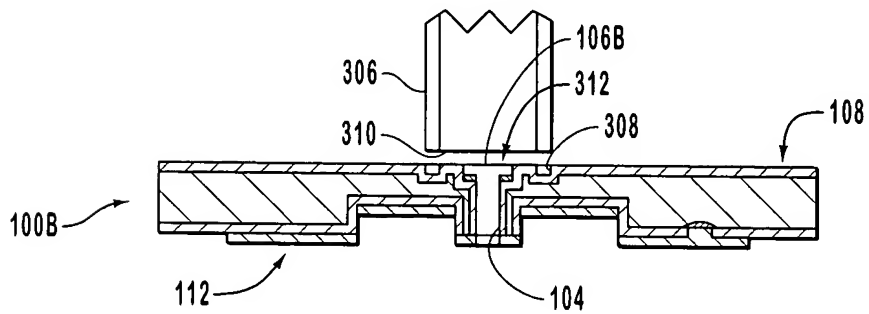


FIG. 21B

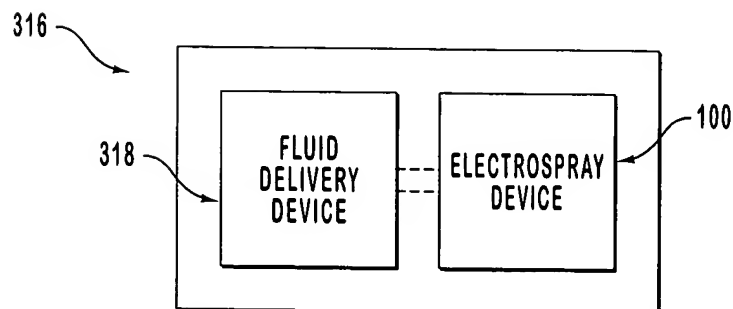


FIG. 22

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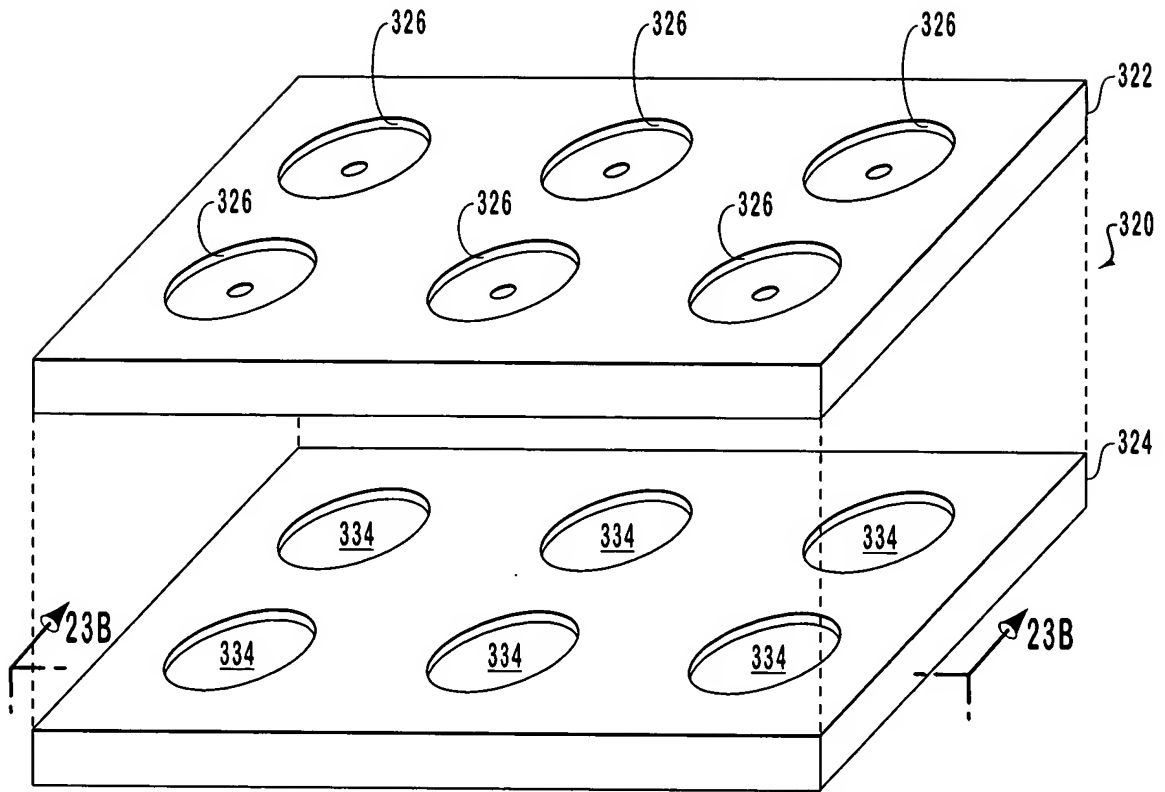


FIG. 23A

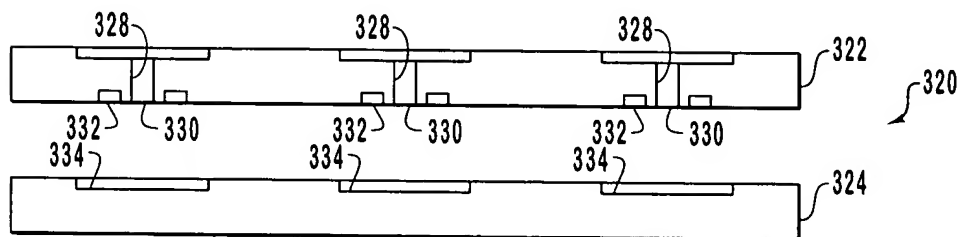


FIG. 23B

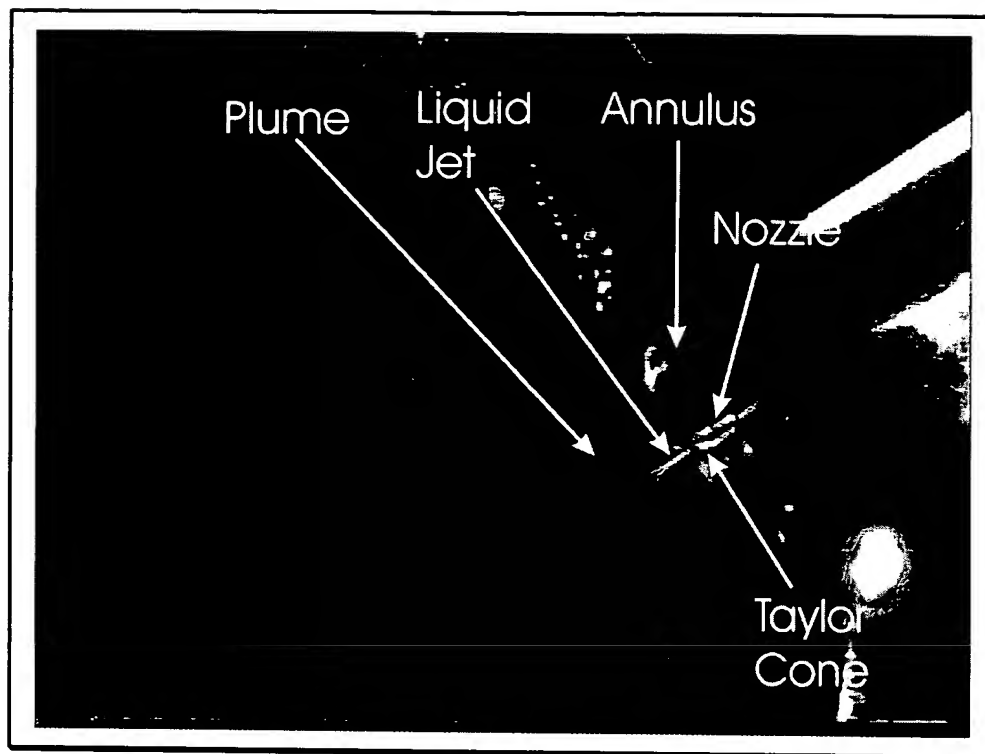


FIG. 24A

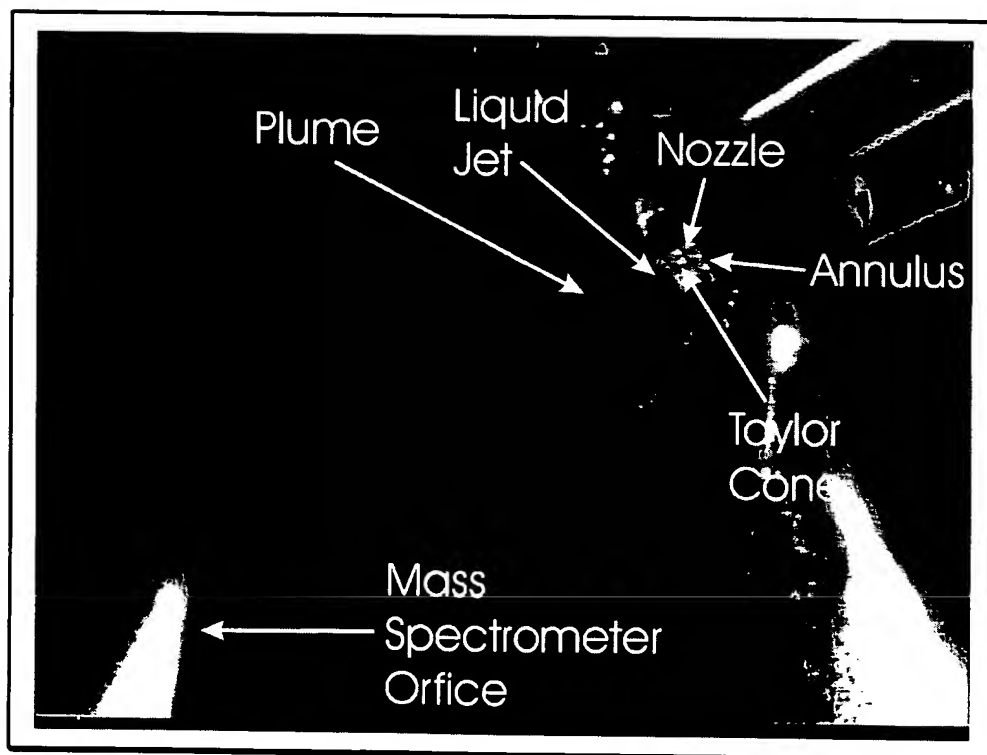


FIG. 24B

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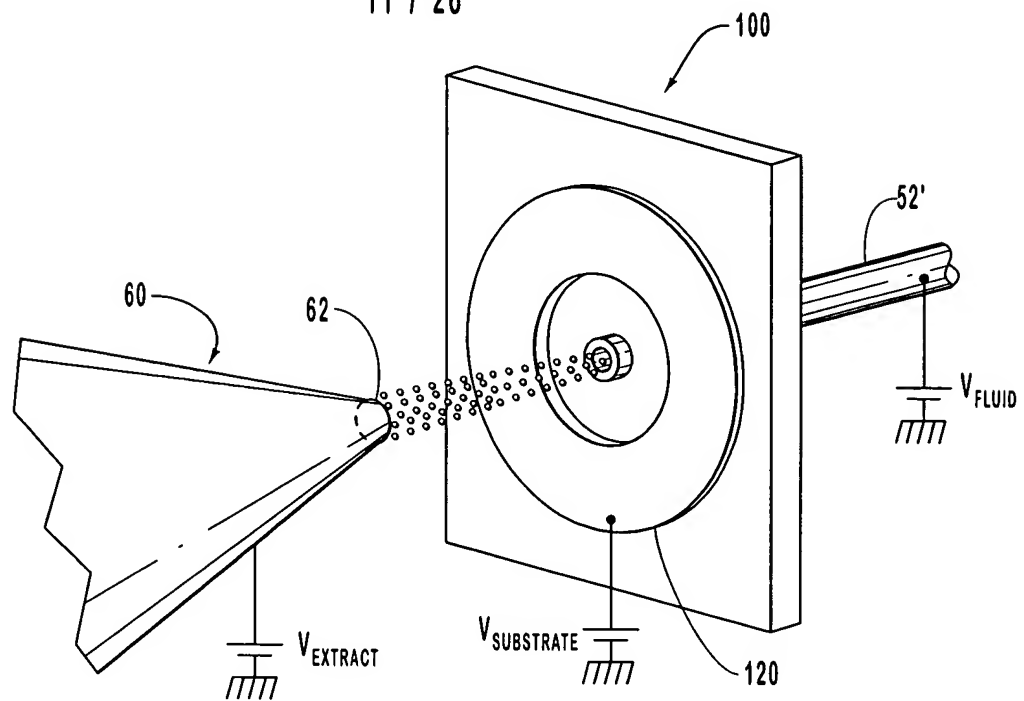


FIG. 24C

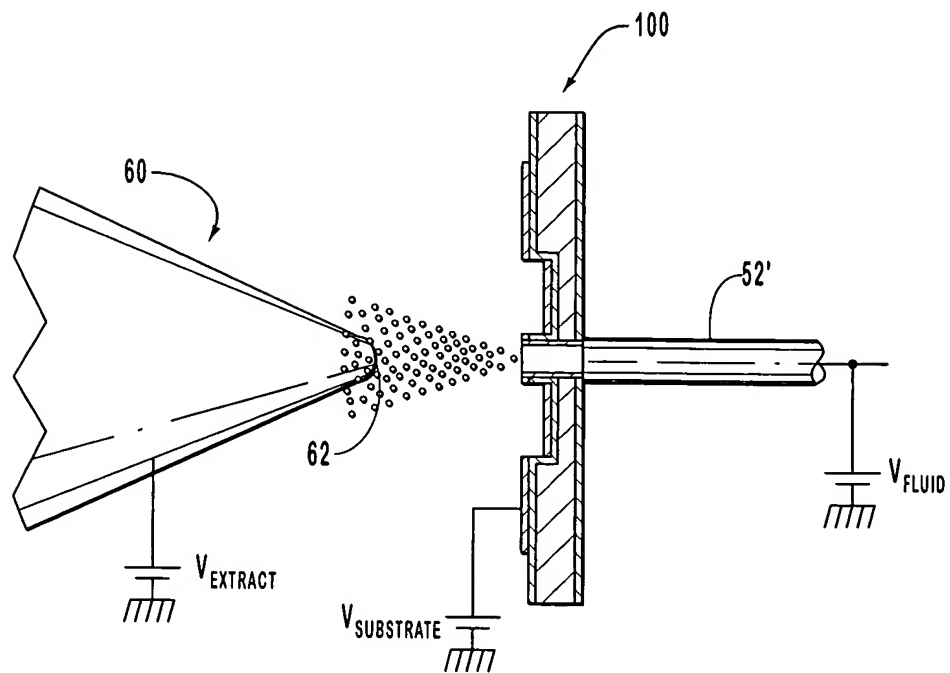


FIG. 24D

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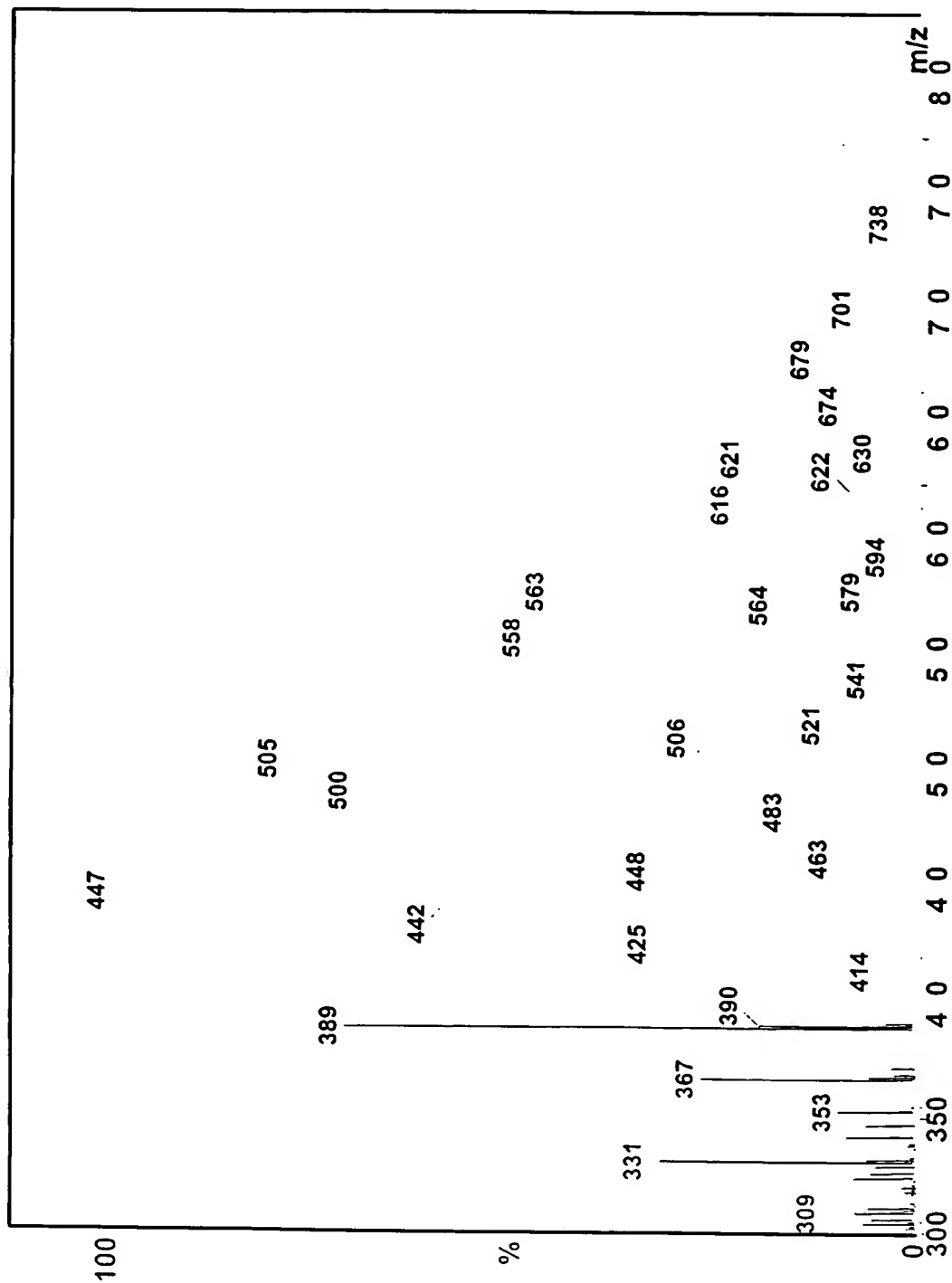


FIG. 24E

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[illegible]

FIG. 25B

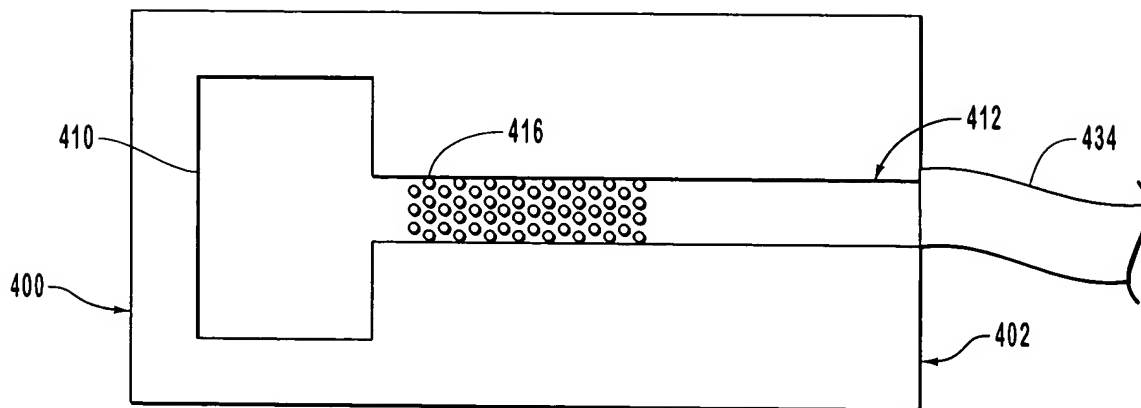


FIG. 26

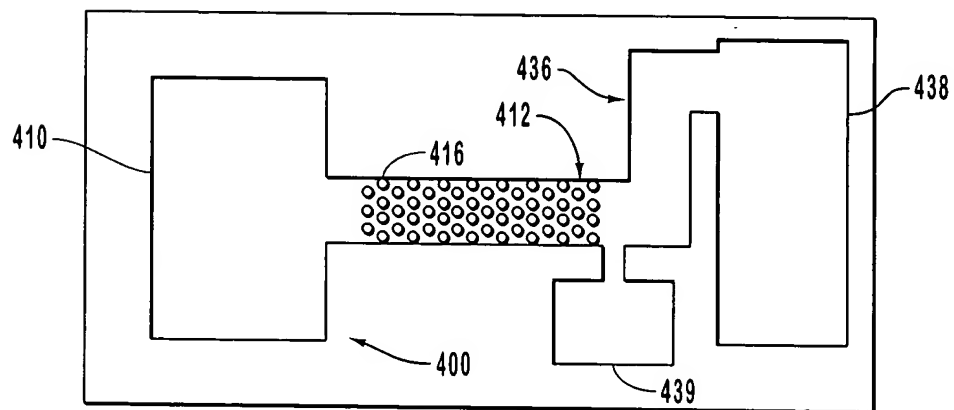


FIG. 27

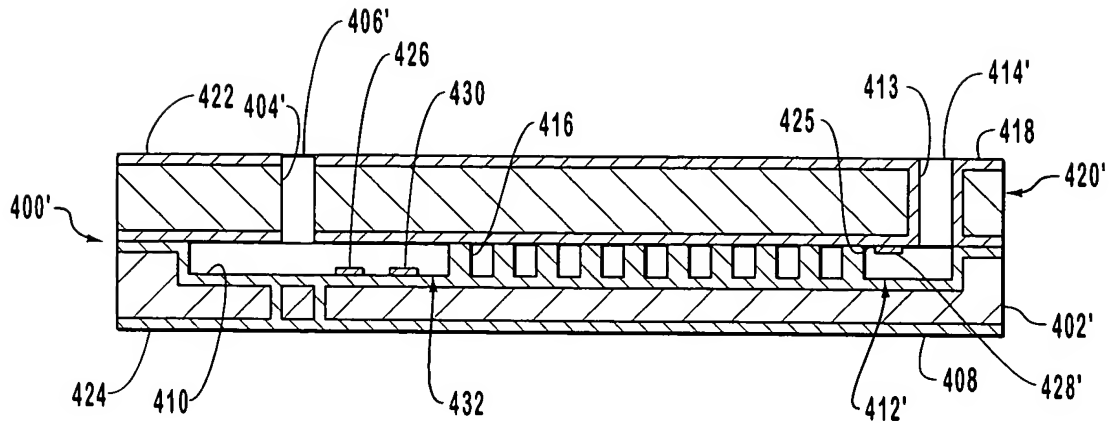


FIG. 28

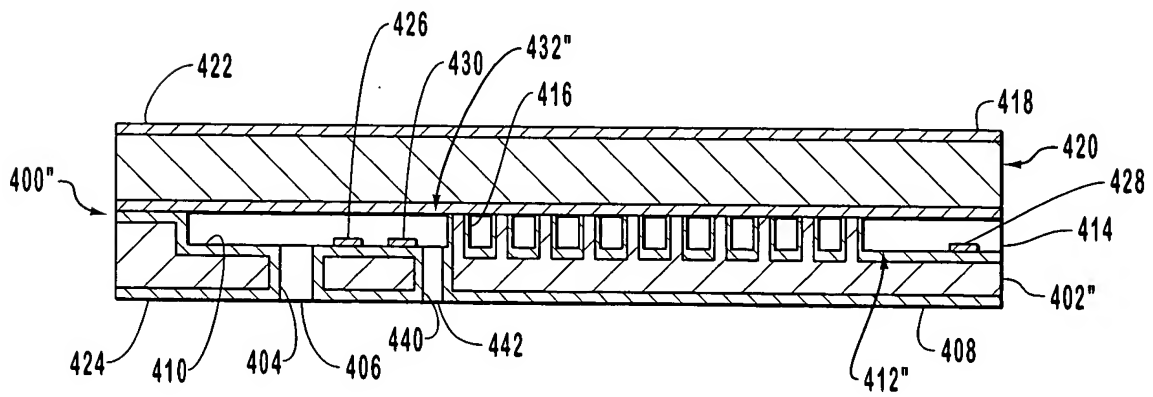


FIG. 29

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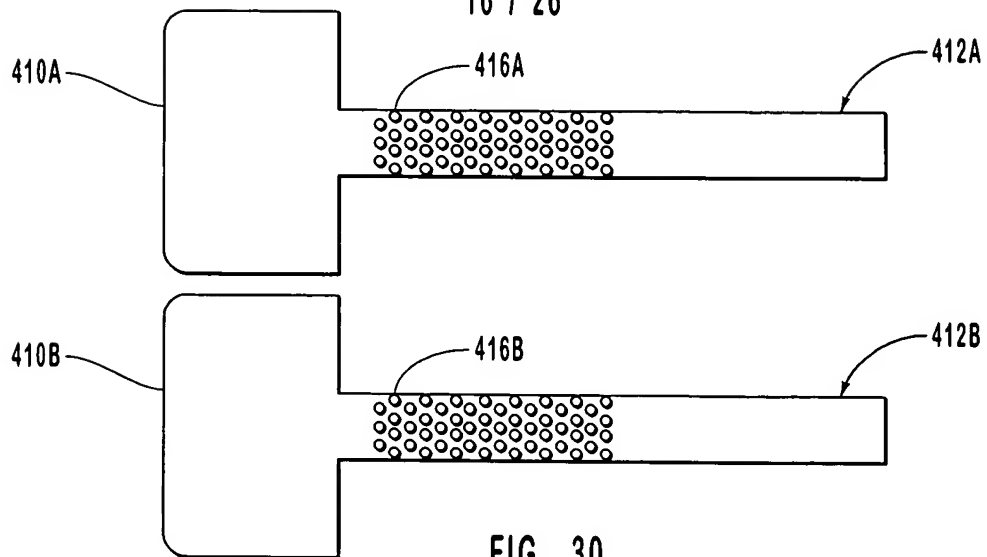


FIG. 30

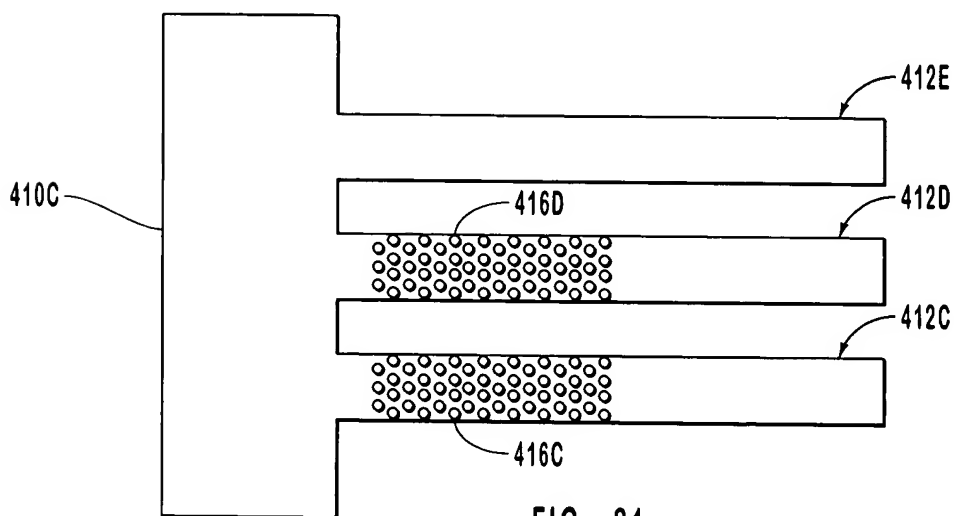


FIG. 31

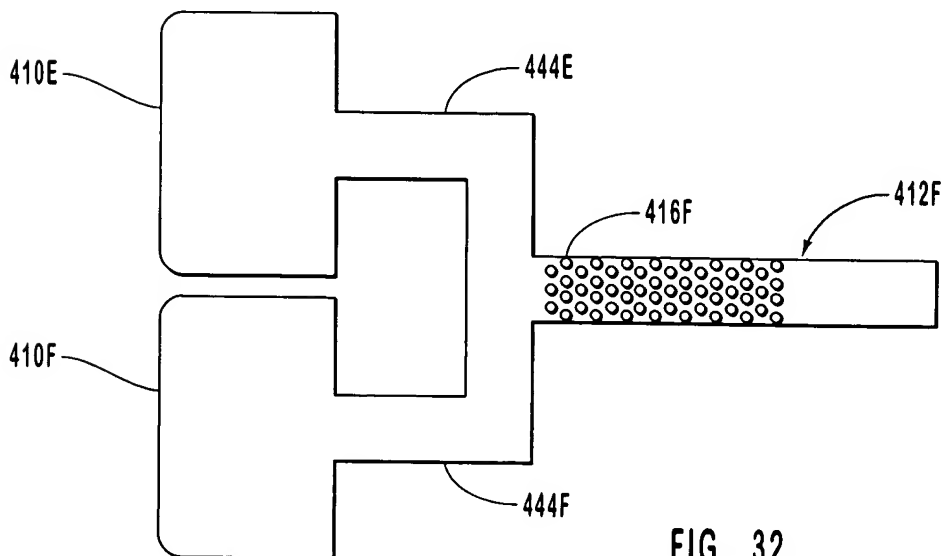


FIG. 32

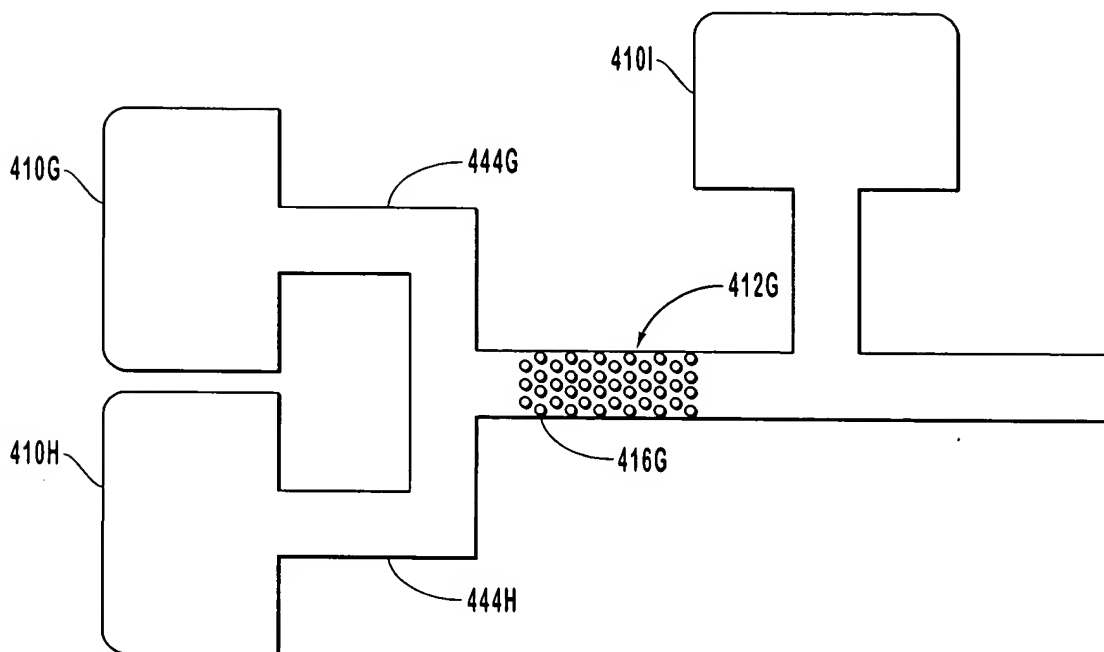


FIG. 33

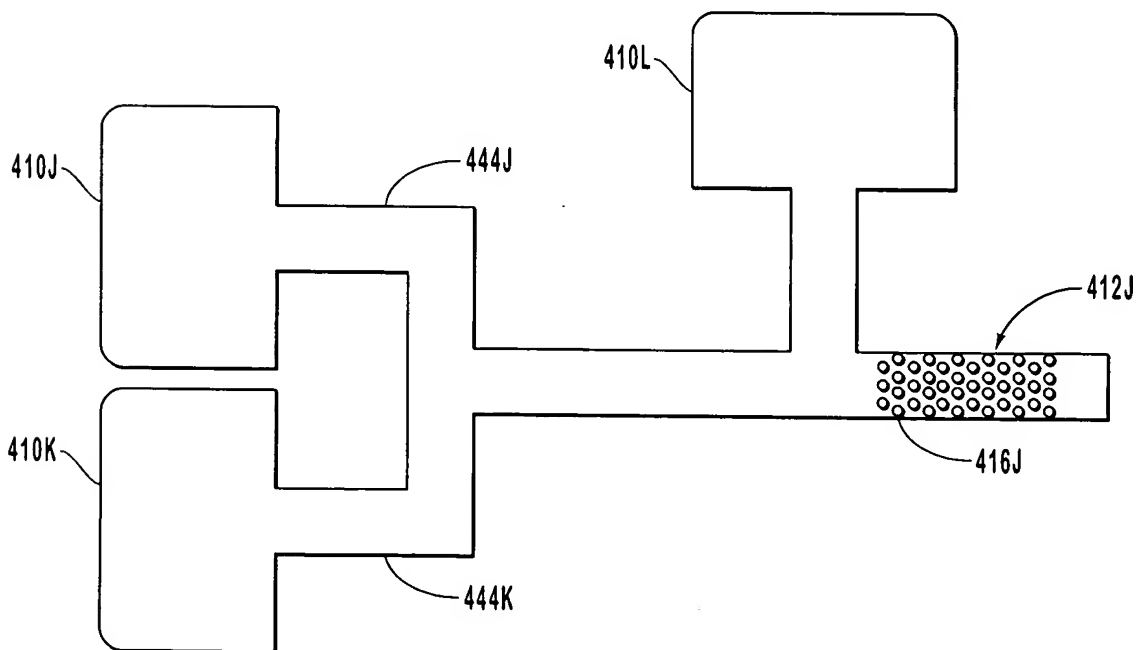


FIG. 34

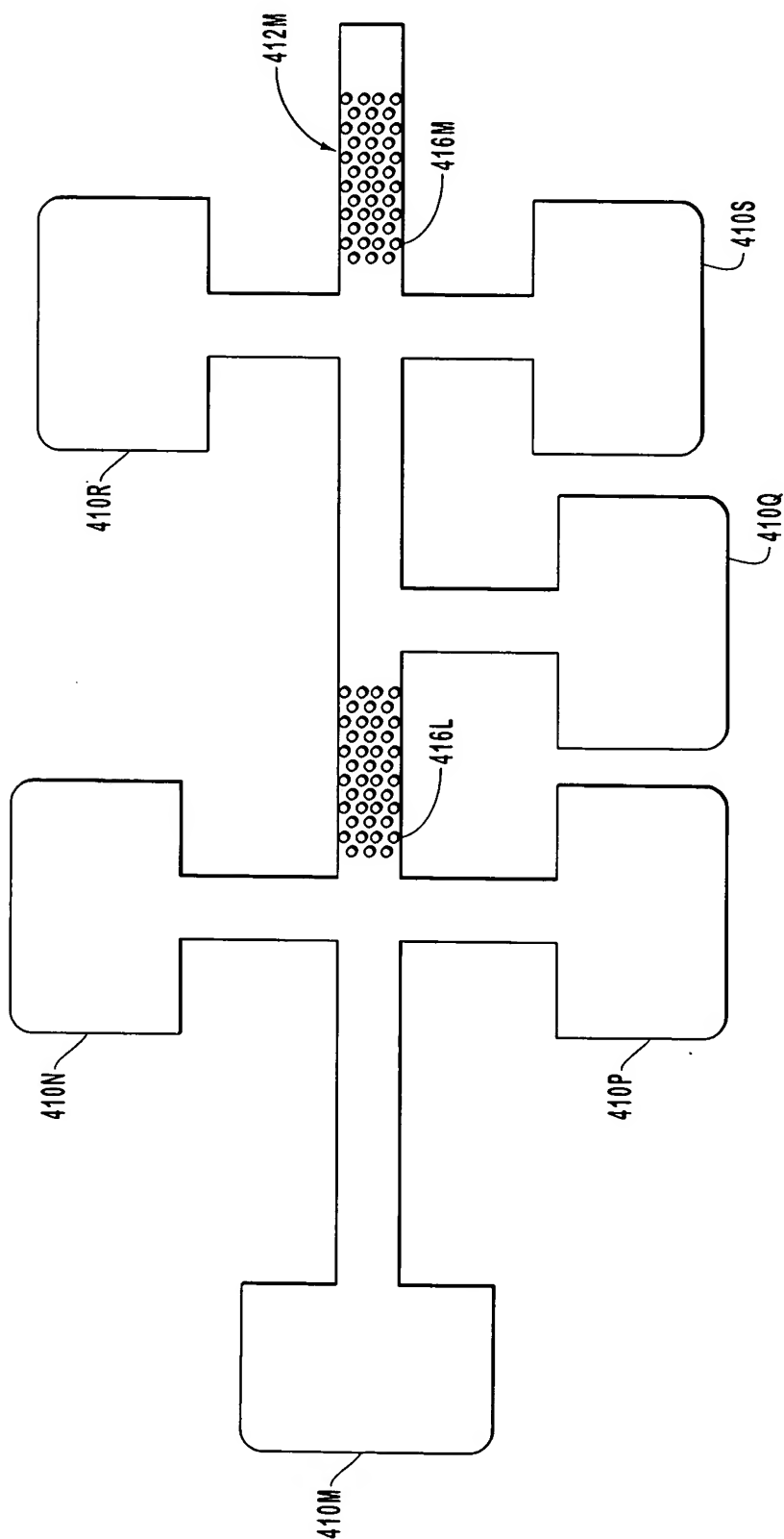


FIG. 35

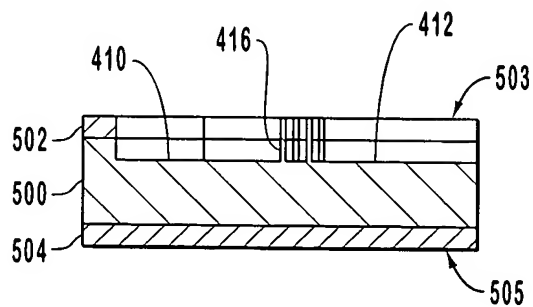
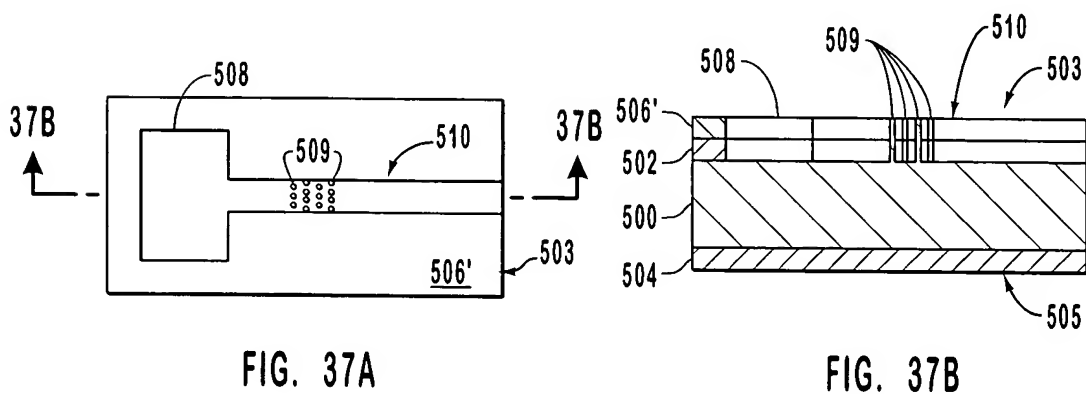
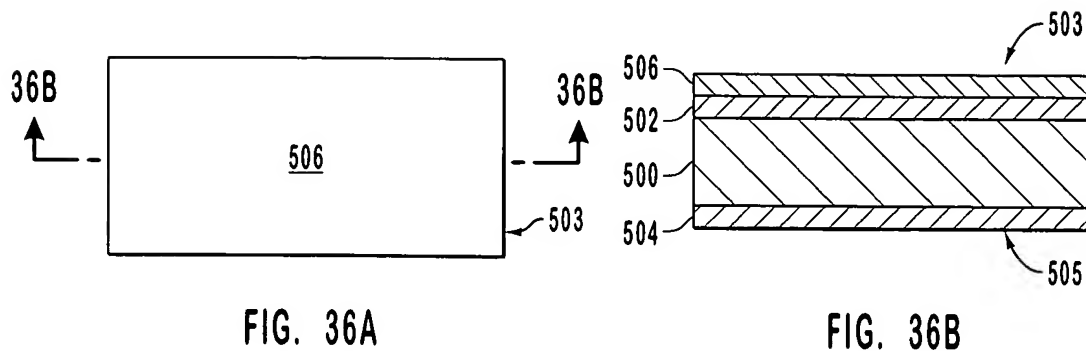


FIG. 38

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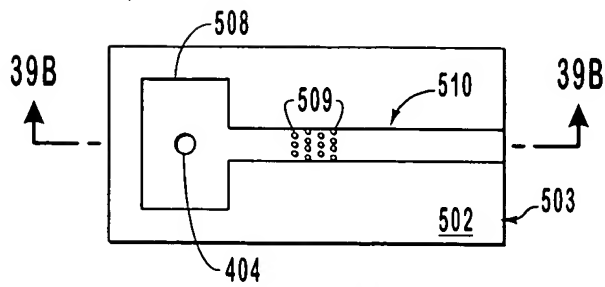


FIG. 39A

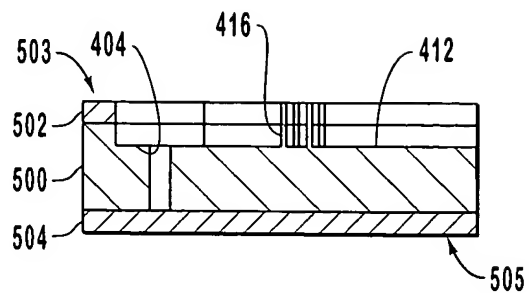


FIG. 39B

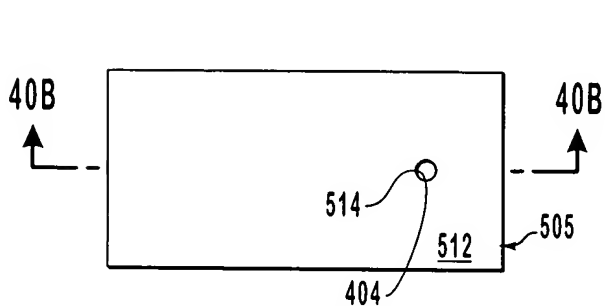


FIG. 40A

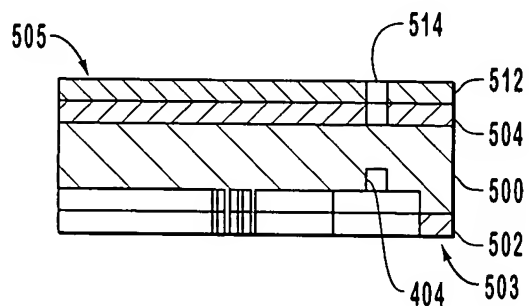


FIG. 40B

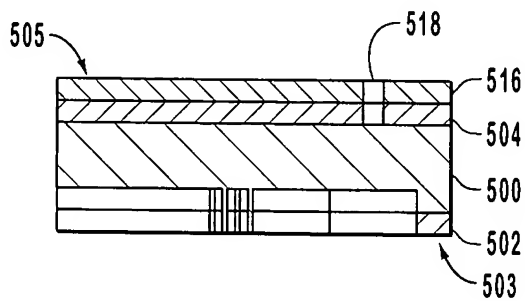


FIG. 41

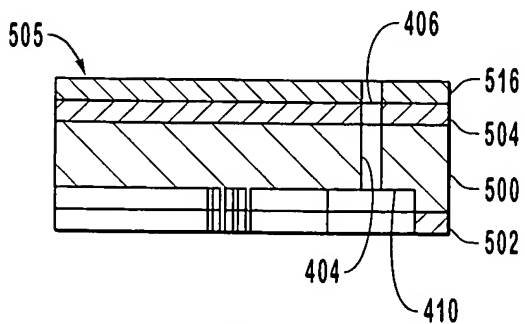


FIG. 42

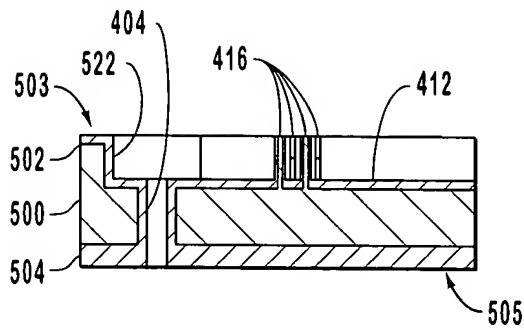


FIG. 43

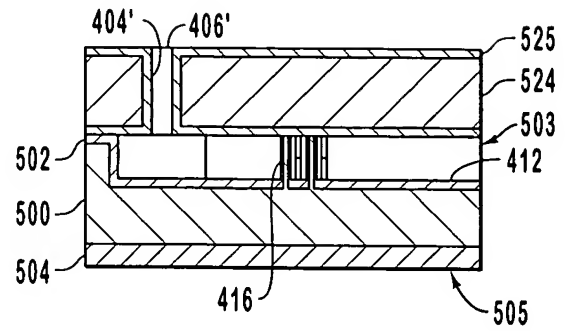


FIG. 45

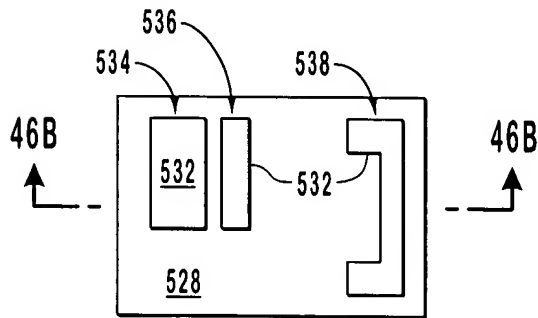


FIG. 46A

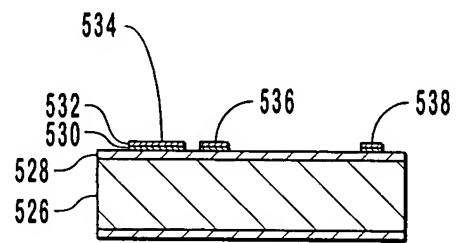


FIG. 46B

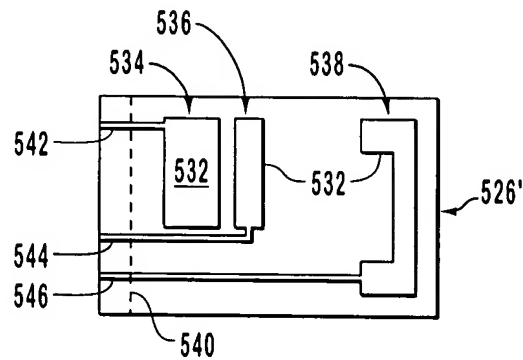


FIG. 46C

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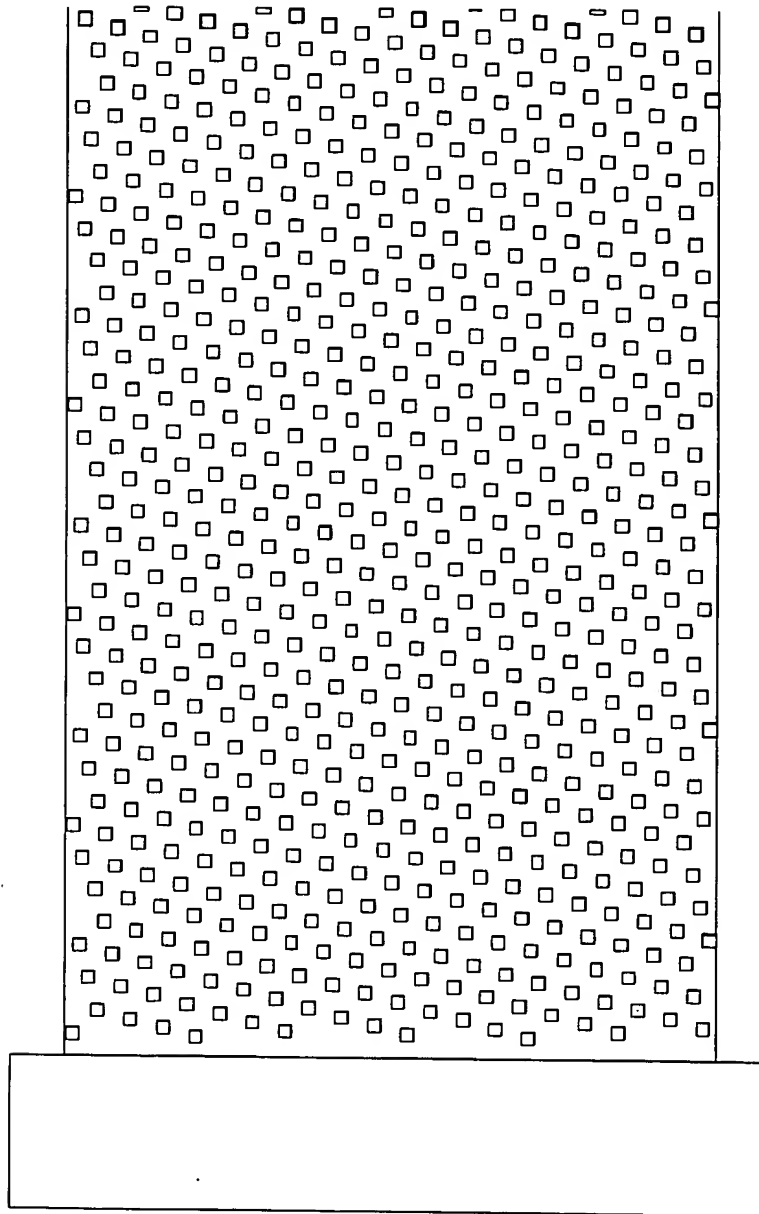


FIG. 44A

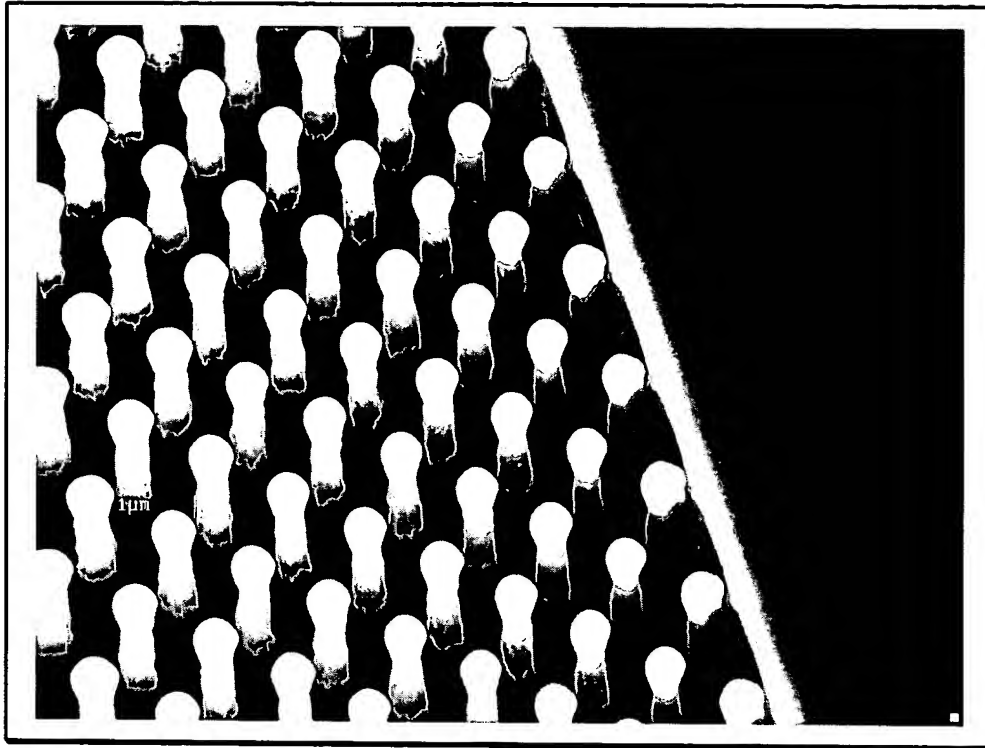


FIG. 44B

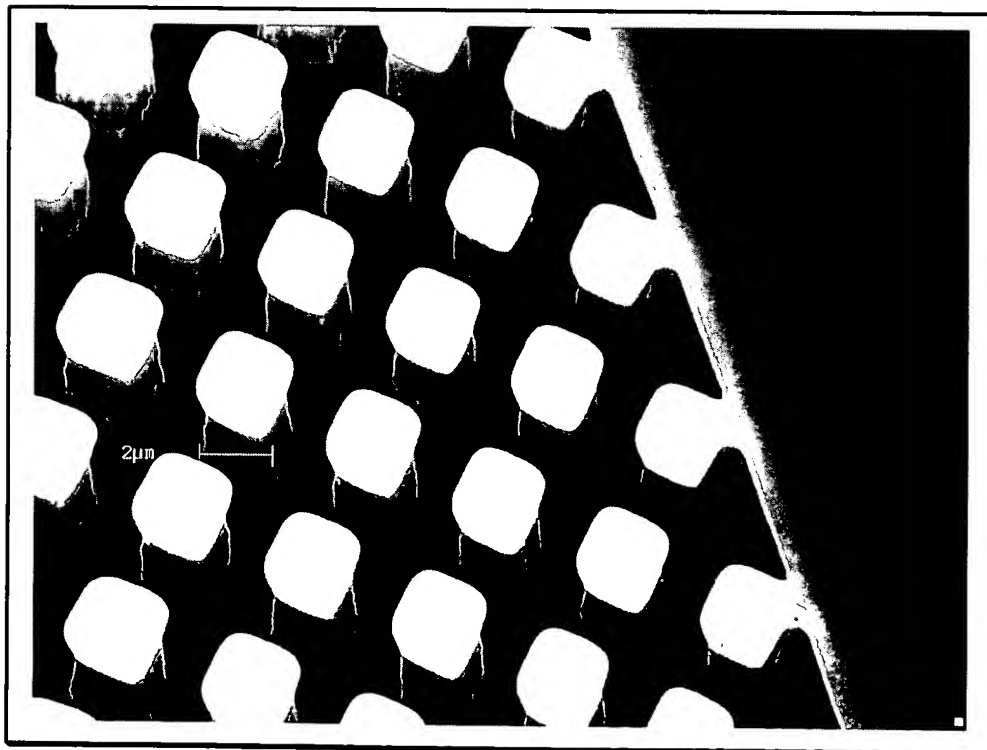


FIG. 44C

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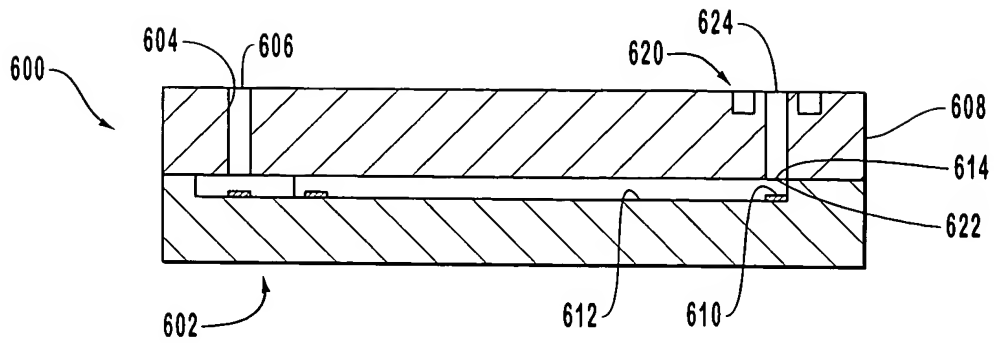


FIG. 47

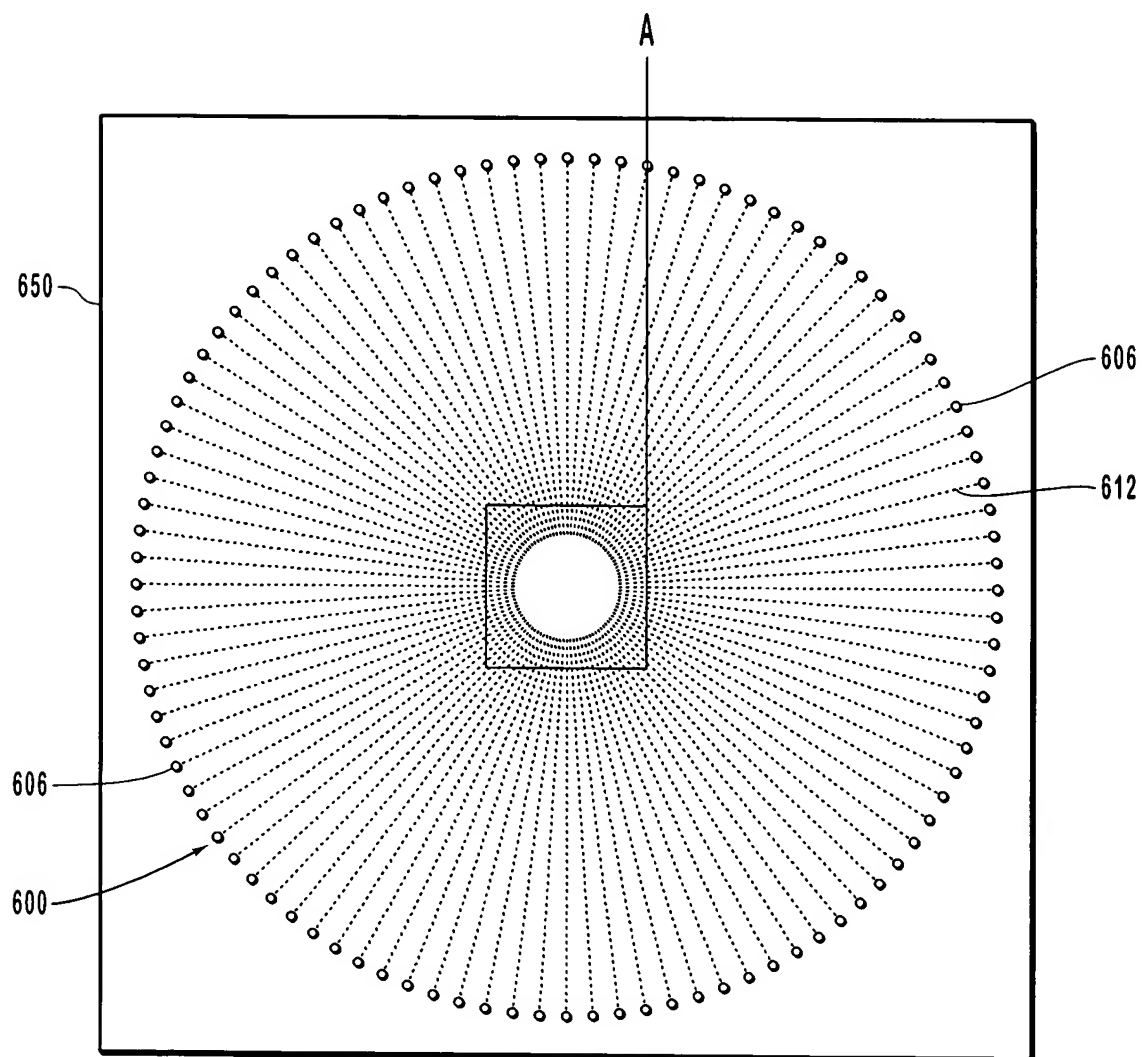


FIG. 48

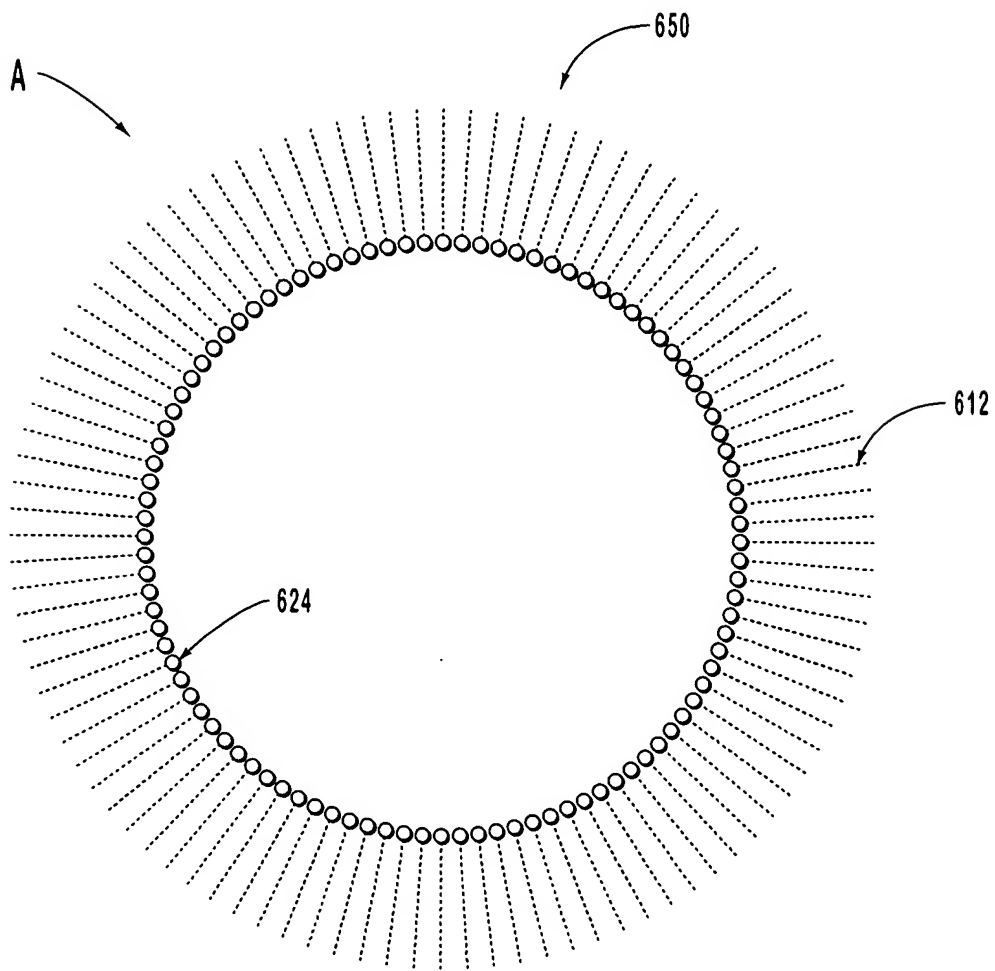


FIG. 49